

Landscape Construction Documents for : STREETSCAPE - ORANGECREST PA - 2 Phase 3

City of Riverside, Ca.

Tract 28866-3 ~Public Works Submittal~

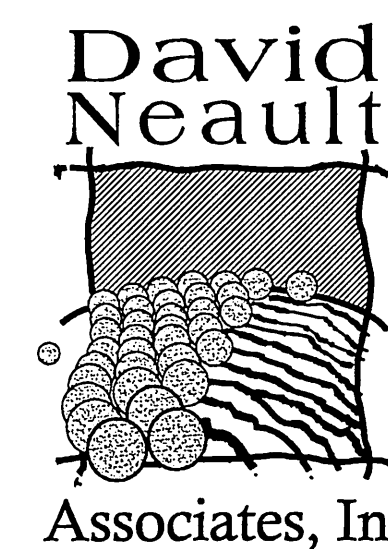
CIVIL ENGINEER:

KEITH COMPANIES
22690 CACTUS AVENUE, SUITE 300
MORENO VALLEY, CALIFORNIA 92553
(909) 653-0234
CONTACT: Tom Bitney

DEVELOPER:

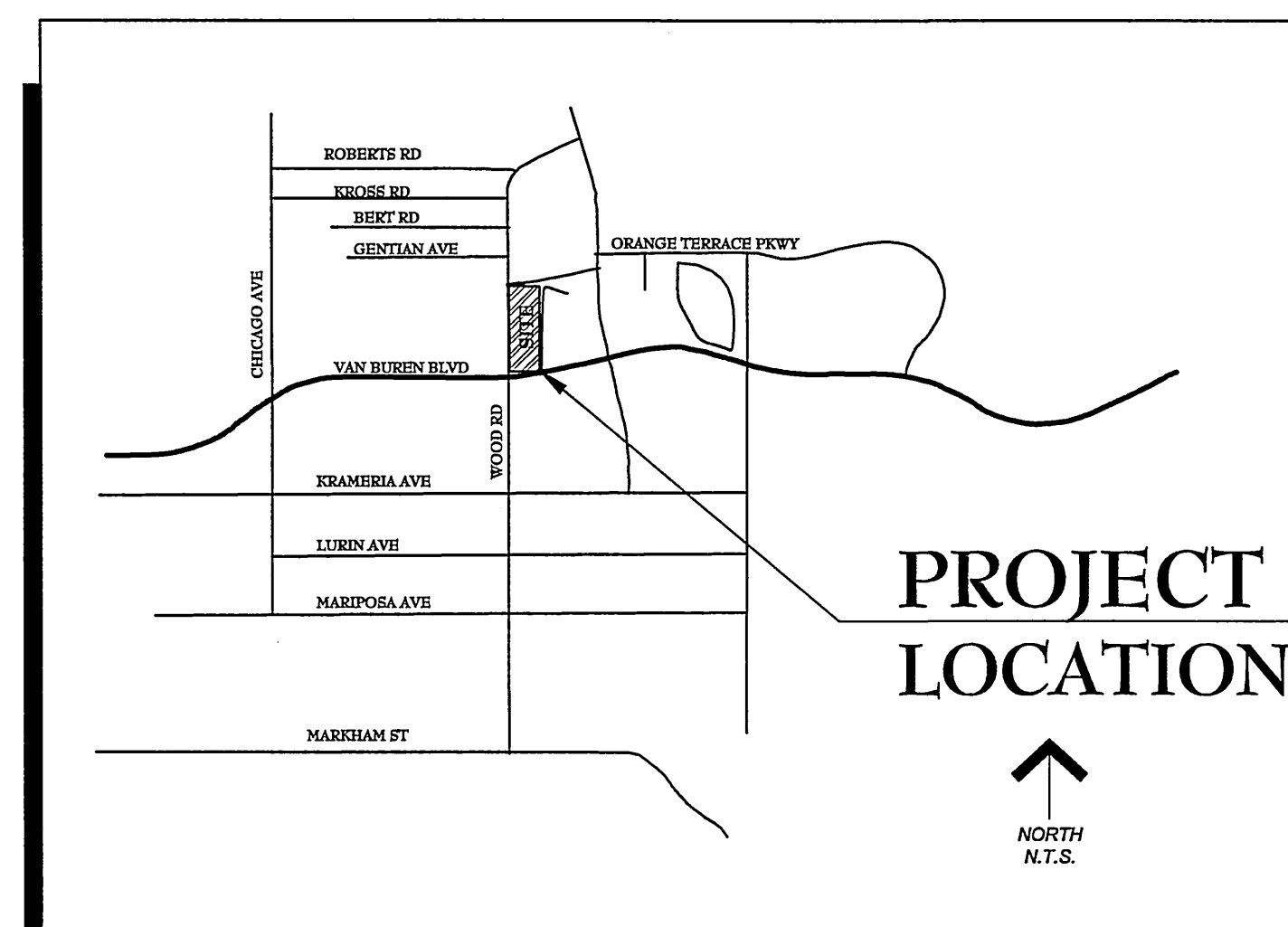
COMMUNITIES SOUTHWEST
181 OLD SPRINGS ROAD
ANAHEIM, CALIFORNIA 92808
(714) 279-6555
CONTACT: Mary Rauschenburg

LANDSCAPE ARCHITECT:

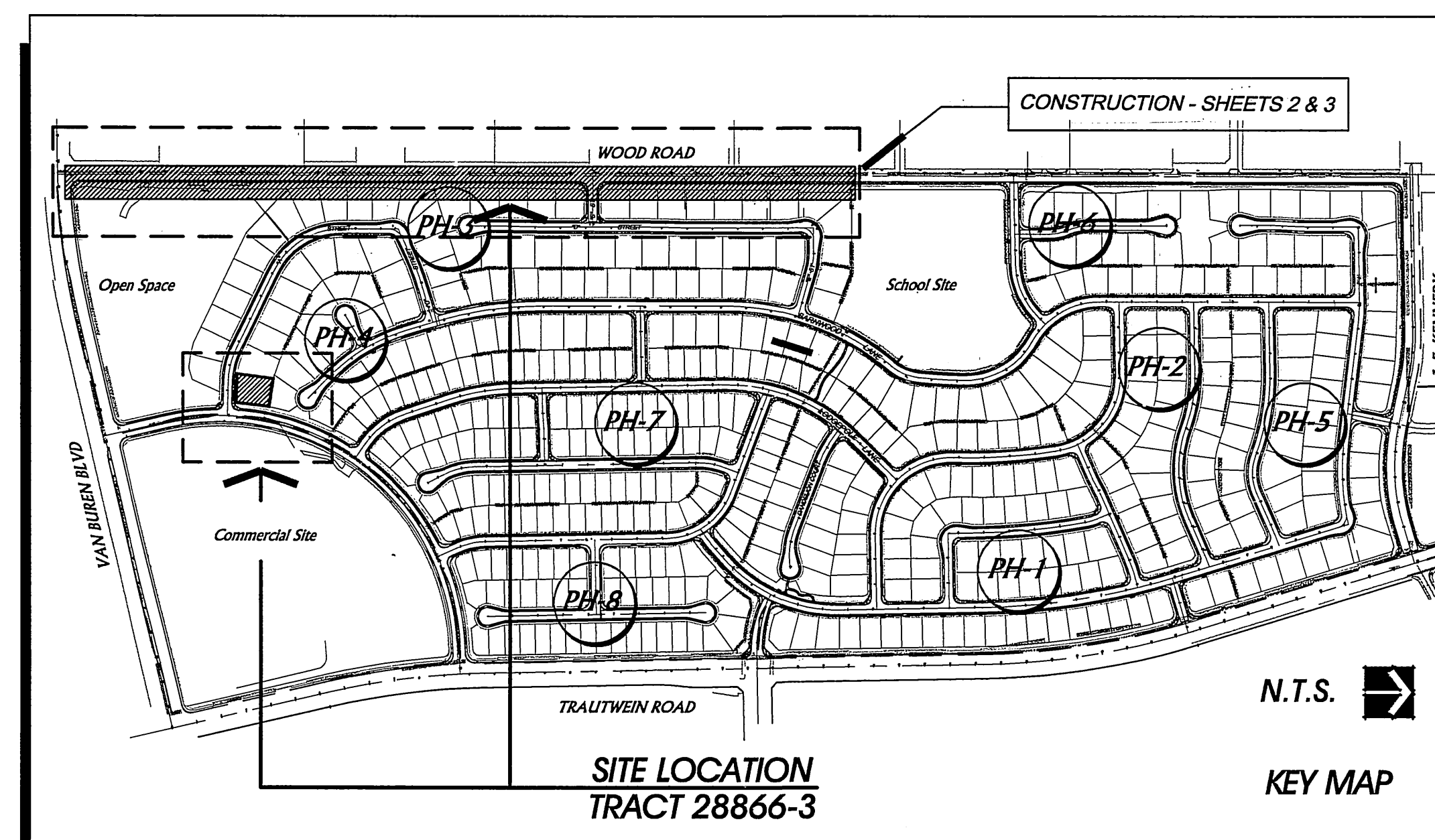


DAVID NEAULT ASSOCIATES, INC.
41877 ENTERPRISE CIRCLE NORTH SUITE 200
TEMECULA, CALIFORNIA 92590
(909) 296-3430
CONTACT: Bob Taft

PROJECT VICINITY



KEY MAP



GENERAL NOTES : SHEET INDEX

GENERAL NOTES FOR HOA MAINTAINED PUBLIC LANDSCAPES

- ALL RELATED WORK SHALL CONFORM TO THE CITY OF RIVERSIDE PARK AND RECREATION DEPARTMENT STANDARDS, INCLUDING CITY TRAIL STANDARDS AND SPECIFICATIONS FOR PLANTING AND IRRIGATION WORK (SPECIFICATIONS SECTION 0241 AND 0248).
- WHEN CALLING FOR INSPECTIONS CONTACT THE PARK PROJECTS INSPECTOR A MINIMUM OF 48 HOURS IN ADVANCE AT (909) 296-3430 TO SCHEDULE AN INSPECTION. A FIELD NOTICE WILL BE ISSUED AS WRITTEN APPROVAL FOR EACH STAGE OF INSPECTION. A VISUAL APPROVAL WILL NOT BE THE CONTRACTOR'S RESPONSIBILITY FOR THE STANDARD SPECIFICATIONS, AND INCLUDE BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:
 - AFTER COMPLETION OF FINAL GRADING OF THE LOTS AND WHEN ALL UTILITY SERVICES AND SEWER LATERALS HAVE BEEN MARKED, BUT PRIOR TO INITIATING ANY TRAIL CONSTRUCTION AND / OR LANDSCAPE WORK WITHIN THE PUBLIC RIGHT OF WAY.
 - AT THE TIME OF INSTALLATION OF IRRIGATION VALVES AND CONSTANT PRESSURE MAINLINES, BUT PRIOR TO BACKFILL OF TRENCHES FOR SAME (NOTE: THIS INSPECTION IS A PRELIMINARY INSPECTION FOR THE PARK PROJECTS INSPECTOR).
 - AT THE TIME OF INSTALLATION OF RECREATIONAL TRAILS FOR INSPECTION OF D/G SUBGRADE AND TRAIL SURFACING INSTALLATION.
 - AT THE TIME OF INSTALLATION OF IRRIGATION VALVES, LATERAL AND HEADS.
- FOR SPOTTING OF ALL TREES PRIOR TO DIGGING PLANTING PITS; WHILE DIGGING PLANT PITS AND PLANTING/RELOCATING TREES; AFTER PLANTING AND ALL OTHER INDICATED OR SPECIFIED WORK HAS BEEN COMPLETED FOR START OF MAINTENANCE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE RIGHT OF WAY IN ACCORDANCE WITH THE PROVISIONS OF LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCES AND AT NO COST TO THE CITY.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, ITS SUPPLEMENTAL NOTES AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
- THE ARCHITECT SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE WORKS HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY (THIS NOTE REQUIRED ON ALL PLANS).
- NOTE: IN THE INTEREST OF PUBLIC SAFETY AND MAINTENANCE THE PARK PROJECTS INSPECTOR SHALL HAVE THE AUTHORITY TO REVERSE THE TREE QUANTITIES AND LOCATIONS SHOWN ON APPROVED PLANS BASED UPON FIELD CONDITIONS FOUND AT THE TIME OF INSTALLATION OF THE TREES.

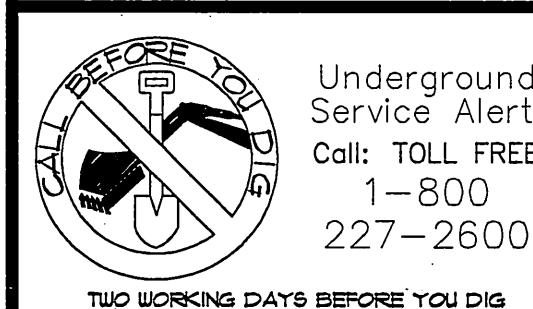
TITLE SHEET	
CONSTRUCTION PLAN	2
CONSTRUCTION PLAN	3
CONSTRUCTION DETAILS	4
CONSTRUCTION DETAILS	5
CONSTRUCTION SPECIFICATIONS	6

NOTE: THE PROPOSED REVERSE FRONTAGE WALLS ALONG TRAUTWEIN RD. & J.F. KENNEDY ARE TO BE MAINTAINED BY THE HOME OWNERS ASSOCIATION OF THE SUBDIVISION.

NOTE: THESE PLANS DO NOT REQUIRE PARKS DEPARTMENT SIGNATURE/APPROVAL PER BOB JOHNSON 10/2000.

PLANNING DEPARTMENT

SIGNATURE
11/16/00
DATE



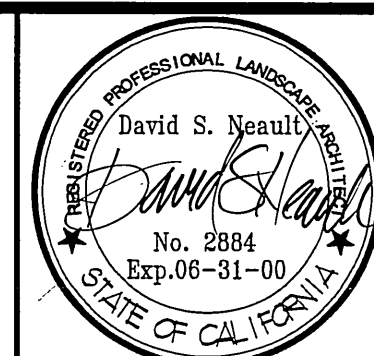
Underground
Service Alert
Call: TOLL FREE
1-800
227-2600

PRIVATE ENGINEERING NOTE

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO OBTAIN NECESSARY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

BENCHMARK

RIVERSIDE COUNTY BENCHMARK STAMPED VSS-64
AT SOUTHWEST CORNER OF FLUPPER ROAD AND VAN BUREN
BOULEVARD, 2550 FEET SOUTH OF VAN BUREN BOULEVARD, 3250
FEET WEST OF FLUPPER ROAD, ON THE TOP OF A 4.5' TYP. X 12.5'
FOOT GRANITE BOULDER A BRASS DISK FLUSH AND MARKED
ELEV. 1038.4



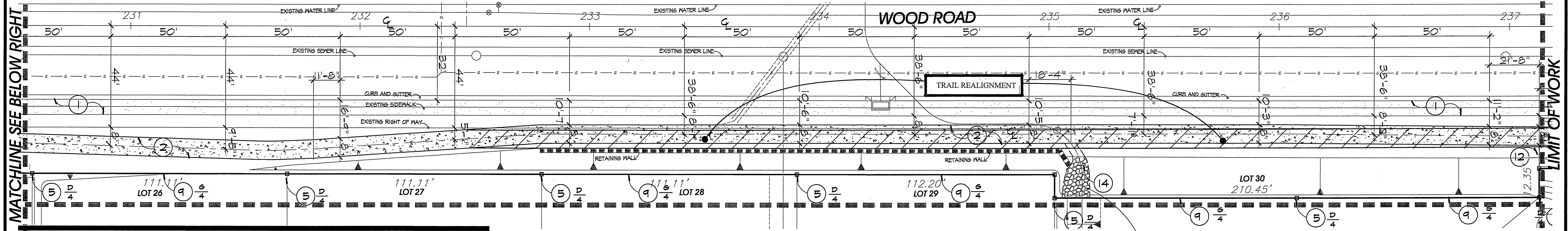
David
Neault
Associates, Inc.
landscape architecture • planning • golf course architecture
City of Riverside Business Tax Account No. 100000-Exp. 10/00/01
DAVID S. NEAULT 2884
PREPARED BY: DATE 2/20/00
R.L.A. NO. DATE 2/20/00

MARK REVISIONS. APPR. DATE
DESIGNED BY MSi DRAWN BY MSi CHECKED BY BT

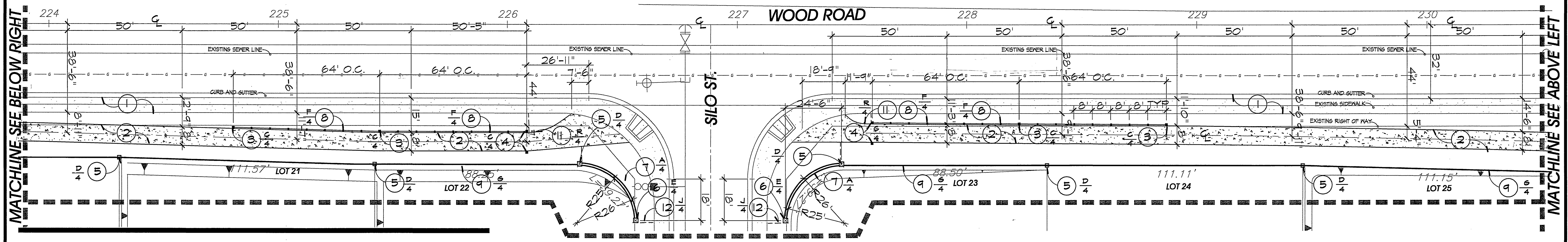
CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
APPROVED BY DATE BY
PRINCIPAL ENGINEER DATE BY
PARK DEPARTMENT SEE NOTE ABOVE
TRAFFIC DIVISION
PROPERTY P.W. DIRECTOR 2/19/00 BT
STREET SERVICES 2/20/00 808
DATE 12-21-2000

REVERSE FRONTAGE WALL & MULTI-PURPOSE TRAIL
CONSTRUCTION PLAN
TITLE SHEET
TRACT 28866-3
WOOD ROAD
ACCOUNT NO. 31372
R-3538-WP
SHEET 1 OF 6
11/16/2000

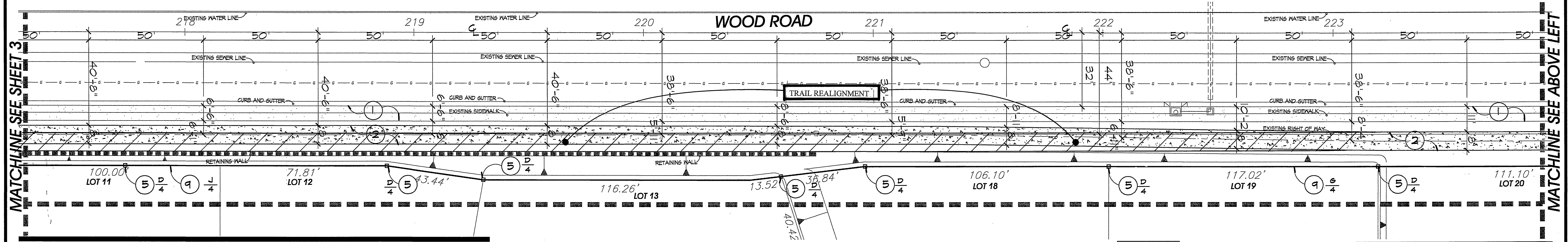
INDEXED 1-8-01 Lft



PLAN VIEW FROM STA. 230+58.90 TO STA. 237+13.07

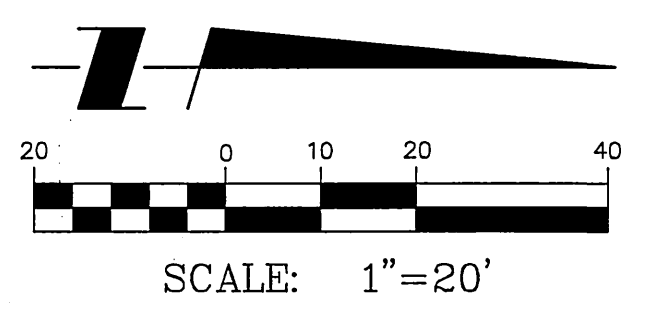


PLAN VIEW FROM STA. 223+91.20 TO STA. 230+58.90



PLAN VIEW FROM STA. 217+32.70 TO STA. 223+91.20

SEE SHEET 4 FOR DETAILS & MATERIAL SCHEDULE
SEE SHEET 5 FOR SPECS.



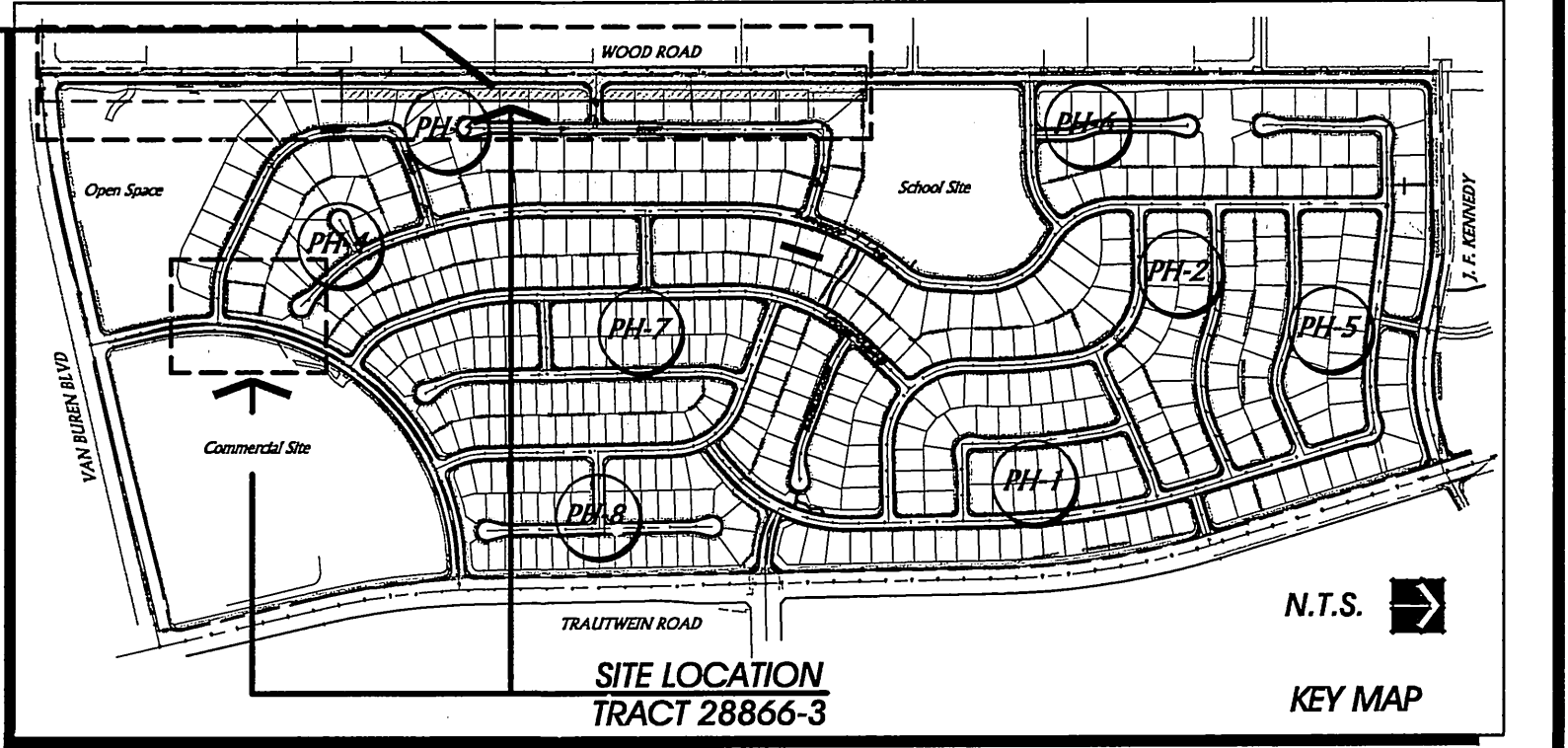
AS-BUILTS

THIS SIGNATURE IS TO CONFIRM THAT THESE HARDSCAPE FEATURES WERE INSTALLED IN THESE APPROXIMATE LOCATIONS.

[Signature]

PLANNING DEPARTMENT

[Signature] 11/16/00
SIGNATURE DATE



Underground Service Alert
Call: TOLL FREE 1-800-227-2600
TWO WORKING DAYS BEFORE YOU DIG

PRIVATE ENGINEERING NOTE
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BENCHMARK
RIVERSIDE COUNTY BENCHMARK, STAMPED YES-64 AT SOUTHWEST CORNER OF FLUMER ROAD AND VAN BUREN BOULEVARD, 3540 FEET SOUTH OF VAN BUREN BOULEVARD, 2250 FEET WEST OF FLUMER ROAD, ON THE TOP OF A 40 FOOT x 100 FOOT GRANITE BOLLARD, A BRASS DISK, FLUSH AND MARKED, ELEV. 1638.14

David S. Neault
No. 2884
Exp. 06-31-00
STATE OF CALIFORNIA

David Neault Associates, Inc.
landscape architecture • planning • golf course architecture
City of Riverside Business Tax Account No. 100000-000-112901
PREPARED BY: *[Signature]* 2884
R.L.A. NO. DATE: 2/20/00

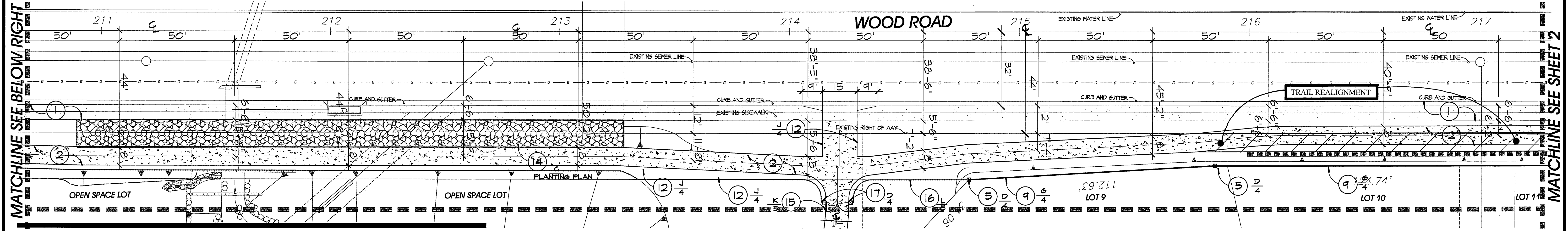
DESIGNED: M. SILVA DRAWN: M. SILVA CHECKED: BOB TAFT

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

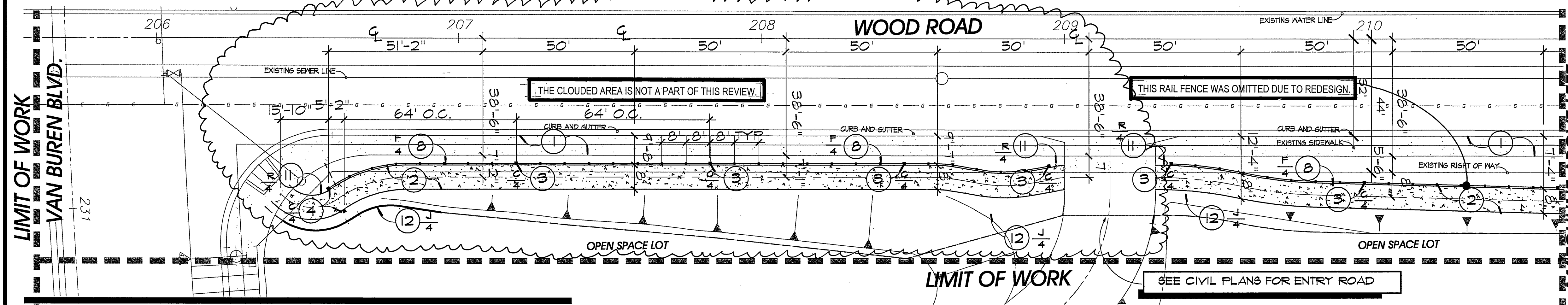
APPROVED BY: *[Signature]* DATE: 12/14/00
PRINCIPAL ENGINEER
PARK DEPARTMENT
TRAFFIC DIVISION
DEPUTY PH DIRECTOR
STREET SERVICES

REVERSE FRONTAGE WALL & MULTI-PURPOSE TRAIL
CONSTRUCTION PLAN
Construction Plan
TRACT 28866-3
WOOD ROAD
HORIZ. SCALE: 1"=20'

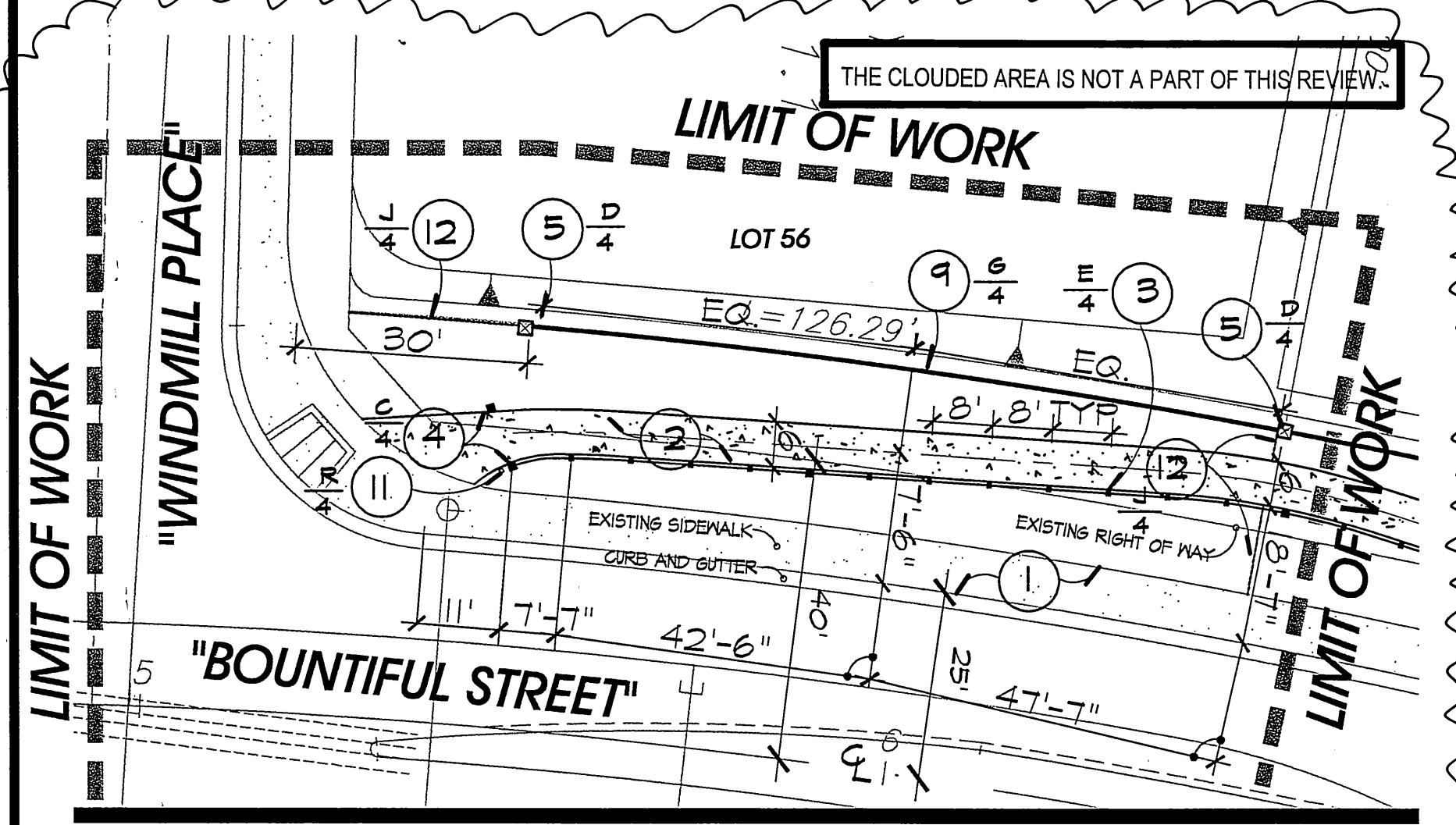
ACCOUNT NO. 31372
R-3538-WP
SHEET 2 OF 6
11/16/2000



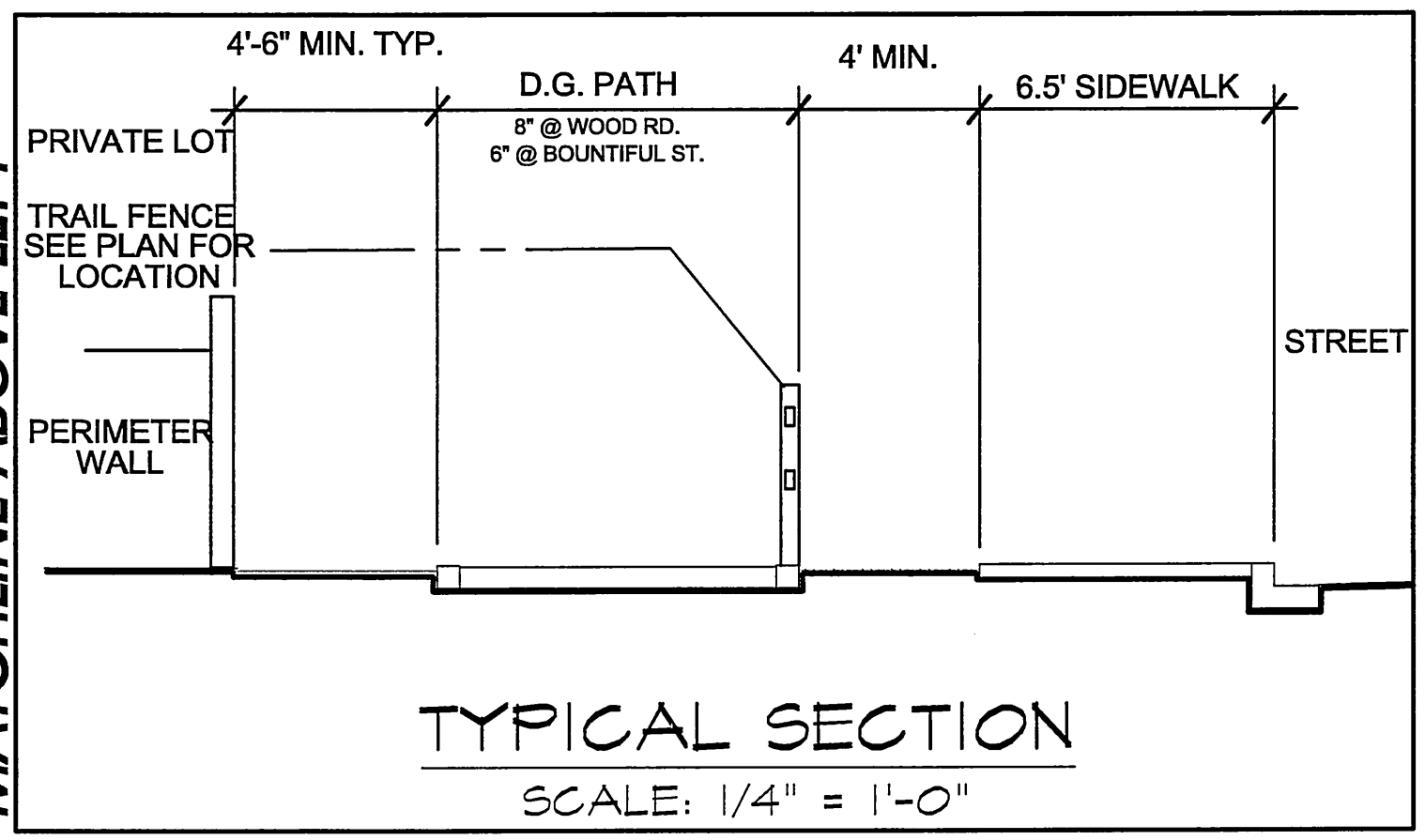
PLAN VIEW FROM STA. 210+65.70 TO STA. 217+32.70



PLAN VIEW FROM STA. 206+23.20 TO STA. 210+65.70



PLAN VIEW OF WINDMILL PL. & BOUNTIFUL ST.

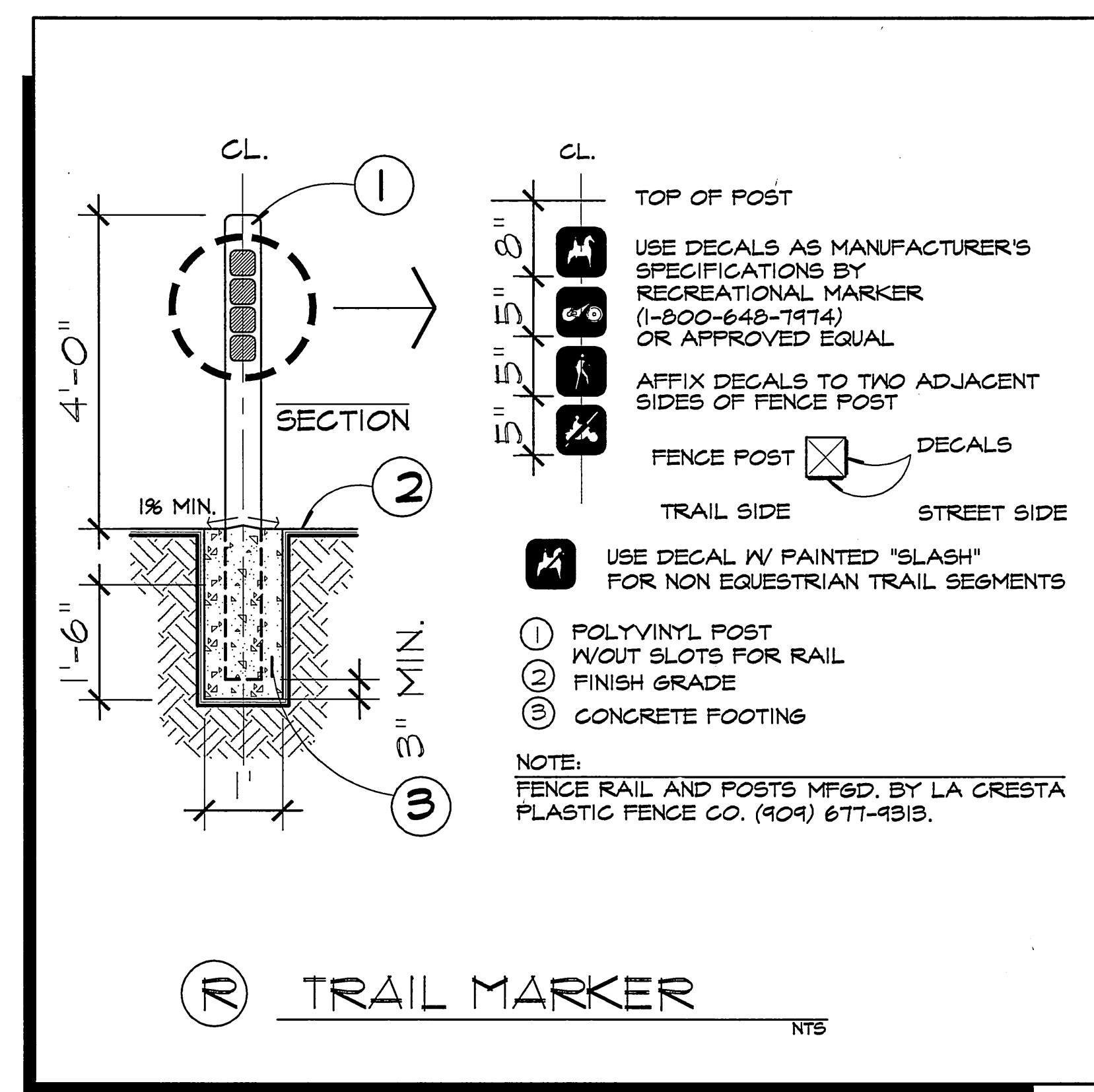


TYPICAL SECTION
SCALE: 1/4" = 1'-0"

CONSTRUCTION LEGEND

SYMBOL	DESCRIPTION	QUANTITY	REFERENCE	SYMBOL	DESCRIPTION	QUANTITY	REFERENCE
1	CITY CONCRETE SIDEWALK	REFER TO PLAN	REFER TO ENGINEER'S PLAN	9	PERIMETER WALL	REFER TO PLAN	REFER TO DETAIL '6'
2	DECOMPOSED GRANITE PATH	REFER TO PLAN	REFER TO DETAIL 'B'	10	CONCRETE WALK	REFER TO PLAN	REFER TO DETAIL 'H'
3	LOW PILASTER	REFER TO PLAN	REFER TO DETAIL 'C'	11	TRAIL SIGNAGE	REFER TO PLAN	REFER TO DETAIL 'R'
4	LOW PILASTER W/ FINIAL	REFER TO PLAN	REFER TO DETAIL 'C'	12	6" CONCRETE MON CURB	REFER TO PLAN	REFER TO DETAIL 'J'
5	PERIMETER PILASTER	REFER TO PLAN	REFER TO DETAIL 'D'	13	CATCH BASIN	REFER TO PLAN	REFER TO DETAIL 'I'
6	ENTRY MONUMENT PILASTER W/ FINIAL	REFER TO PLAN	REFER TO DETAIL 'E'	14	RIVER ROCK RIP RAP	REFER TO PLAN	REFER TO ENGINEER'S PLAN
7	ENTRY MONUMENT WALL	REFER TO PLAN	REFER TO DETAIL 'A'	15	TUB.STL.GATE	REFER TO PLAN	REFER TO DETAIL 'K'
8	TRAIL FENCE	REFER TO PLAN	REFER TO DETAIL 'F'	16	TUB.STL.FENCE	REFER TO PLAN	REFER TO DETAIL 'L'
				17	ACCESS PILASTER W/FINIAL	REFER TO PLAN	REFER TO DETAIL 'D'

SEE SHEETS 4 AND 5 FOR CONSTRUCTION DETAILS



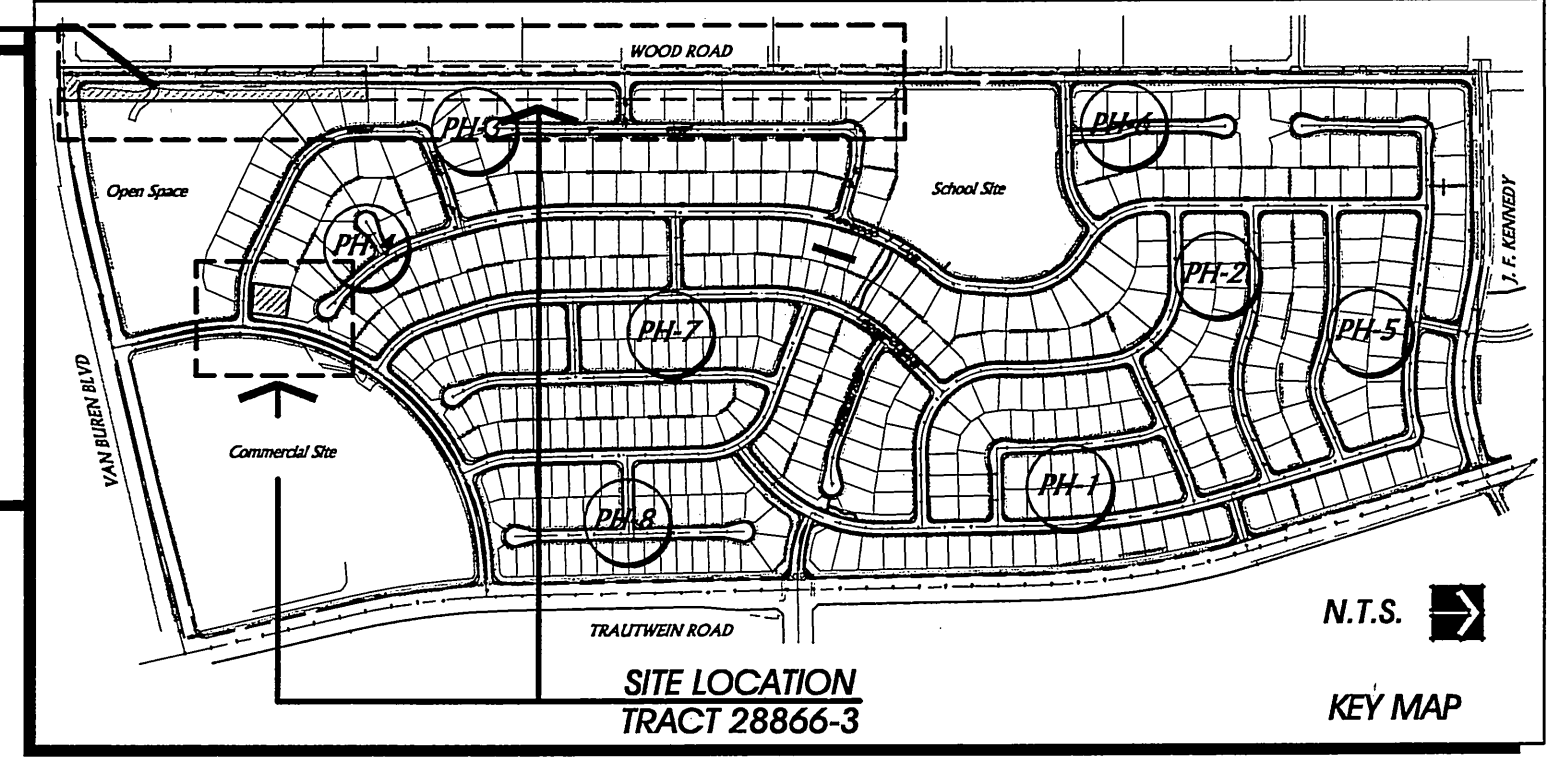
TRAIL MARKER

AS-BUILTS

THIS SIGNATURE IS TO CONFIRM THAT THESE HARDSCAPE FEATURES WERE INSTALLED IN THESE APPROXIMATE LOCATIONS.

PLANNING DEPARTMENT

Jan. B... 11/16/00



SEE SHEET 4 FOR DETAILS & MATERIAL SCHEDULE
SEE SHEET 5 FOR SPECS.

SCALE: 1"=20'

	PRIVATE ENGINEERING NOTE CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY TO DESIGN PROFESSIONAL, HANDED FROM ANY, AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE NEGLIGENCE OF DESIGN PROFESSIONAL.	BENCHMARK RIVERSIDE COUNTY BENCHMARK, STATIONED VBS-64 AT SOUTHWEST CORNER OF PLUMMER ROAD AND VAN BUREN BOULEVARD, 254.0 FEET SOUTH OF VAN BUREN BOULEVARD, 205.0 FEET WEST OF PLUMMER ROAD, ON THE TOP OF A 4.0 FOOT x 12.0 FOOT GRANITE BOULDER, A BRASS DISK, FLUSH AND MARKED, ELEV. 1699.14	David Neault Associates, Inc. 41877 Enterprise Circle North #200 Temecula, CA. 92590 Tel: 909/699-5071 Fax: 909/699-4603 landscape architecture • planning • golf course architecture City of Riverside Business Tax Account No. 190007-000101 DAVID S. NEAULT <i>David Neault</i> 2884 PREPARED BY: DATE 2/29/00 R.L.A. NO. DATE 2/29/00	CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT APPROVED BY: DATE BY: PUBLIC WORKS DIRECTOR PRINCIPAL ENGINEER: R. McSwartz PARK DEPARTMENT: 12/19/00 TRAFFIC DIVISION: 12/19/00 DEPUTY P.M. DIRECTOR: 12/21/2000 STREET SERVICES: 12/21/2000	REVERSE FRONTAGE WALL & MULTI-PURPOSE TRAIL CONSTRUCTION PLAN Construction Plan TRACT 28866-3 WOOD ROAD HORIZ. SCALE: 1"=20' ACCOUNT NO. 31377 R-3538-WP SHEET 3 OF 6 11/16/2000
	UNDERGROUND SERVICE ALERT CALL: TOLL FREE 1-800-227-2600 TWO WORKING DAYS BEFORE YOU DIG				
	INDEXED 1-B-01 4-11				

SECTION 02210 - GRADING

PART 1 - GENERAL

1.01 STANDARD SPECIFICATIONS: The provisions of the "Standard Specifications for Public Works Construction" shall apply except as modified herein.

1.02 SCOPE: The Work of this Section shall consist of furnishing all labor, materials, equipment, appliances and services necessary for the execution and completion of all Grading as shown on the Plans and as described in the Specifications. Including, but not necessarily limited to, the following:

- Rough grading as shown on the plans, including cut, fill, backfill and backfill compaction
- Subgrade preparation for trails including any over-excavation and re-compaction as may be required.
- Excavation, backfill and compaction of soils for all structural footings
- Excavation, backfill and compaction of soils for all sumps
- Soil compaction as required
- Protective measures
- Dust and noise abatement
- Borrow from and/or export to a local borrow/disposal site as necessary for a balanced grading operation
- Fine grading of the work site
- Decomposed Granite Paving
- Soil testing as required
- Coordination with Work of other Sections
- Clean-up
- Erosion Repairs, Guarantees and Warranty Work.

1.03 RELATED WORK SPECIFIED ELSEWHERE:
Excavation and Backfill for Irrigation, Section 02441
Finish Grading in Landscaped Areas, Section 02480

1.04 QUALITY ASSURANCE:

A. Other Requirements: All Work of this Section shall comply with the requirements of the following:
1. The Grading Code of the City of Riverside.

B. Tests and Inspections:
1. All Work in this Section shall be subject to the observation and testing as required by the Park Project Inspector (P.P.I.) The PPI will conduct all specified tests to insure compliance. The PPI will also test, identify and make recommendations on borrow site fill materials as specified in this Section.

2. The number and location of soils tests shall be at the discretion of PPI to assure uniformity and compliance with the City Grading Ordinance, and shall be at least one test per two vertical feet of fill, but not less than one test per 500 cubic yards, all as approved by the PPI.

1.05 WATER: See Special Provisions Section 7-8.5 Temporary Light, Power, and Water regarding temporary construction water.

1.06 JOB CONDITIONS:

A. Protection of Existing Items:
1. Contractor shall furnish, place and maintain all shoring and bracing as may be required for protection of existing structures and utility services during execution of the Work.
2. All bench marks, monuments and other reference points shall remain undisturbed unless specifically directed otherwise by the Park Projects Inspector.

B. Coordination with Others:
1. Contractor shall give written notice to PPI, utility agencies, and other legal authorities prior to starting Work.
2. Contractor shall coordinate Contractor's operations with other trades, utility agencies, and other affected public departments to assure continuity for both access and service of all utility service distribution lines, in conformance with applicable requirements of these organizations. No services to any property shall be impeded.

C. Abandoned and Unknown Utilities:
1. Abandoned lines, meters and boxes, obstructions or piping, shall be removed, plugged, or capped in accordance with the requirements and approval of the agencies affected, or as directed by the Park Projects Inspector. Coordinate all such Work with applicable mechanical or electrical trade having responsibility. Remove all abandoned utility lines, pipes, or conduits, to a point outside new construction lines.
2. Where unmarked utility lines or other underground obstructions or piping are uncovered within the Work area, notify the agencies or service utility companies having jurisdiction and take necessary measures to prevent interruption of services. Should such lines or services be damaged, broken, or interrupted through Contractor's own negligence, those services shall be repaired immediately by the party designated by the utility owner, at Contractor's expense. If an unmarked utility is damaged other than through the negligence of Contractor, Contractor's responsibility is limited to providing immediate and proper notification of the damage to the utility owner so that repairs can be made. Contractor shall cooperate with the utility owner and provide access for repair work.

PART 2 - MATERIALS

2.01 D.G. PAVING:

A. D.G.: Shall be black and white, decomposed granite free of silt, clay, weed seed, and any other deleterious material, as approved by the Parks Department Representative. Contractor shall provide a one pound sample to the Parks Department Representative a minimum of 35 days prior to ordering materials for the review and approval of the Parks Department Representative.

B. Organic Binder: Shall be "Organic Binder" as supplied by Stabilizer Inc., 1/800/336-2468, or City approved equal.

2.02 DRAIN ROCK: Drain rock for all sumps and french drains shall be pervious backfill as specified in standard Specifications, Section 302-3.5.2 Pervious Backfill.

2.03 FILL MATERIAL:

A. Required Approval: All fill material must be approved by the PPI.

B. On-site Material: On-site excavated materials may be used for fill as approved by the PPI.

2.04 GRANULAR BEDDING MATERIAL: Where called for on the Plans, granular bedding material shall be crushed stone or pea gravel conforming to the following grading:
Sieve Size % Passing

3/4"	100
1/2"	95
#4	5

2.05 IMPORT:

A. Landscape Fills: All Import soil used for fill in landscape areas shall be Class 'A' topsoil per standard Specifications, Section 212-11 Top Soil, General.

B. Structural Fills: All Import soil used solely for structural fill shall be non-expansive, predominantly granular material free from organic contaminants, and capable of attaining the required compacted densities.

C. Approved Samples: Samples of all Import soil, as obtained by the City's Inspector at the borrow site, must be approved by the PPI prior to start of Import of soil to the Project site.

PART 3 - EXECUTION

3.01 GENERAL:

A. Work Sequence: All demolition, clearing and grubbing of objectionable materials must be completed to the satisfaction of the PPI before starting any earthwork grading and excavation.

3.02 ROUGH GRADING:

A. Conformance with Plans: Rough grading of the site shall be completed in accordance with indicated contours, elevations, and limit lines shown on the Plans and shall allow for the depths of slabs, paving, sub-base, topsoil, and controlled fills.

B. Grading Tolerances:
1. Sub-grades to receive slabs and pavements shall be graded to a tolerance of plus or minus one-half (1/2) inch, and shall be compacted as specified below in Sub-section 3.04 CONTROLLED FILL, paragraph G. Relative Compaction Requirements, sub-paragraph 1. Slabs & Pavement Subgrades.
2. Tolerance for rough grading in all other areas is 1/10th of a foot.
3. In all areas, appearance and positive drainage will be factors in the acceptability of grades.

C. Compacted Lifts: Graded material shall not be left in loose layers, but shall be stockpiled for use in controlled fill or compacted in thin layers as grading takes place in accordance with the requirements for controlled fill.

D. Scarification: Shall be performed on all areas indicated to receive paving to depths as indicated in the soils report. In the absence of a soils report, scarification shall be to a minimum depth of six (6) inches or to a depth permitting twelve (12) inches of controlled fill whichever is greater.

E. Engineer's Approval: Contractor shall obtain the Soil Engineer's approval of all scarified surfaces prior to placement of fill.

3.03 CONTROLLED FILL:

A. Landscape Fills: The topmost 12" of fill in all landscape areas shall be topsoil.

B. Rocks: Rocks larger than two (2) inches in diameter shall be removed from all fills to be compacted.

C. Lifts: Fill material shall be spread in uniform lifts of six (6) to eight (8) inches of un-compacted thickness.

D. Moisture Content: Prior to starting compaction, the fill material shall be brought to optimum moisture content by spraying with water if too dry, and aeration if too wet.

E. Mixing: Thoroughly mix each lift to assure uniform distribution of water content.

F. Allow for Shrinkage & Subsidence: Bring fills to suitable elevations above required grades to provide for effects of shrinkage and settlement.

G. Relative Compaction Requirements:
1. D.G. & Pavement Subgrades: For all areas designated to receive D.G. pavement and within a perimeter two (2) feet outside these areas, each lift shall be compacted to a minimum of 90% of maximum density as determined by ASTM D1557-78.
2. Planting Areas: Where fill is required in planting areas each lift shall be compacted to a minimum of 85% maximum density.
3. Mechanical Equipment: Perform all compaction by suitable mechanical equipment and methods approved by the Soils Engineer.

H. Contractor's Responsibility: During the grading operations, inspection and field tests will be carried on by the PPI. However, Contractor is responsible to ensure obtaining the required degree of compaction and the proper moisture content. Where compaction of less than the specified percentage is found, additional compaction effort shall be made with adjustment of the moisture content as necessary until the minimum specified compaction is obtained.

I. Over-excavation Due to Unsuitable Materials: Excessively wet material, material in any soft or spongy spots, and material in standing water shall be over-excavated to such depth as directed by PPI and replaced with suitable material, properly compacted.

3.04 EXCAVATION: Contractor shall perform all necessary excavation work for footings and slabs and shall perform any additional excavation work necessary to provide ample room for installation of concrete forms where required. The bottom of all excavations shall be level and free from loose material, and shall be brought to the indicated or required grades in undisturbed earth. All excavations shall be kept free of standing water. Contractor shall perform all pumping, dewatering, and dewatering as may be necessary to keep excavations free of standing water while carrying on the Work. Should excavations for footings, through error, be excavated to a greater depth or size than indicated or required, such additional depth or size shall be filled with concrete at Contractor's expense.

3.05 OPEN TRENCH OPERATIONS: Shall conform with Standard Specifications Section 306-1 Open Trench Operations, as modified by the following:

A. General: Add the following to Standard Specifications Section 306-1.11 General:
"Where trench is close to existing pole mounted lights, catch basins, or other structures that are to remain, Contractor shall brace as necessary to prevent dislocation of such structures. In the area of any such structures, the trench backfill shall be compacted to 95% to the full depth of the structure."

B. Replacement of Surface Improvements: Add the following to Standard Specifications Section 306-1.13 Trench Resurfacing:
"Replacement of bituminous pavement and base material over trenches shall conform with Public Works Department Standard Drawing No. 453."

C. Unsuitable Material: Add new subsection 306-1.17 as follows:
3.06-1.17 Unsuitable Material: The conditions and requirements for the determination and disposition of unsuitable material encountered during open trench operations shall be in accordance with Standard Specifications Section 302-2.2 Unsuitable Material.

D. Pipe Bedding: Unless otherwise shown on the Plans, pipe bedding shall conform with Public Works Department Standard Drawing No. 452, Case 1.

E. Trench Backfill: Shall conform with Public Works Department Standard Drawing No. 453.

F. Compaction of Backfill Over VCP: Mechanical compaction of backfill using impact type pavement breakers (stompers) will be not be permitted over vitrified clay pipe within the first 4 feet of backfill over Vitrified Clay Pipes (VCP). Such backfill shall be compacted by other means.

3.06 BACKFILLING:

A. Material: Select site material shall be used for backfill of trenches and shall be free from large stones and clods. Material shall be as approved by the Soils Engineer.

B. Pre-Conditioning and Placement:
1. Layers of backfill shall be pre-conditioned by moistening with water, the amount to be controlled to insure optimum moisture conditions for the type of fill material used. Excess water causing saturated earth beneath footings, walks, and curbs is unacceptable.
2. Backfill shall be deposited in layers of maximum six inch thickness.
3. Backfill shall be compacted by suitable means to a minimum relative compaction of 90%.
4. All trenches shall be backfilled in accordance with this Section, and may be tested at the discretion of the Engineer.

3.07 FINE GRADING: Fine grading, as specified under this Section, is a separate operation from finish grading as specified under Section 02480 Planting. Fine Grading Work is to commence upon completion of all trenching and backfill operations, and prior to soil preparation.

Upon completion of Fine Grading Work all areas shall slope to drain without water pockets or irregularities and shall conform to the intent of all Plans and Specifications after thorough settlement and compaction of the soil. Fine grading should allow for Soil Preparation Work as specified under Section 02480 Planting, such that finish grades shall meet the elevations indicated on the Plans. Tolerance for fine grading is 1/4 inch, plus or minus. Any corrections to the Grading Work required to obtain proper drainage and to bring it into conformance with the intent of the Plans and Specifications and City codes shall be performed by Contractor at no additional cost to City.

3.08 DUST AND NOISE ABATEMENT: During the entire construction period, site areas shall be kept sprinkled as necessary to reduce dust. In the air and annoyance to surrounding properties. Adhere to the requirements of City ordinances for dust and noise control.

END OF SECTION

GRADING AND DRAINAGE

- All surface drainage to be away from all footings, foundations and building walls at a minimum of 2%.
- Cross slopes walks and paving 1% minimum, unless otherwise noted.
- Surface slopes shall be a minimum of 2% to drains in all planting areas.
- Specimen trees shall be in place prior to installation of a drain line. Drain line placement shall be adjusted around trees.
- Lay drain lines with 1% minimum fall to rigid, non perforated types, 2% for corrugated types.
- Round toes and edges of all slopes. Contour slopes between walks and buildings.
- Refer to Civil Engineer drawings for additional grades and information. Verify on-site and report discrepancies to Landscape Architect before start of any work on this contract.
- Perforations in any pipe shall face downward in trench.
- Verify all invert elevations at proposed tie-ins prior to installation. Make any adjustments as necessary to allow minimum fall for required drainage of lines.
- All top-of-grade and invert elevations indicated are approximate. Verify in field.
- Consult owner for FS of entry stoop in relation to FF of building.
- Contractor shall ensure that earth mounding does not interfere with swales depicted on civil engineer's grading plan.

TILE / PAVERS

- Contractor shall submit a sample of each type of tile/pavers and grout color indicated on plans to landscape architect for approval before starting work.
- Ceramic tile grout shall be one part Portland cement and one part graded sand with color and waterproofing additives.
- Setting Bed: Spread setting mortar bed on freshly prepared slabs. Minimum thickness as shown on drawing. Verify elevation of drains and pool equipment to determine that the proper pitch for drainage can be obtained. If any drains or fixtures are found to be too high, correct before start of the work. Set screeds to required levels and slopes. Tamp mortar dense and soil. Remove any mortar nearing initial set before tile is placed.
- Setting and Grouting Tiles: After setting bed has set sufficiently, sprinkle dry Portland cement on surface and commence laying tile. Set straight edges to lines established to keep joints parallel and uniform over entire area. Tamp tile solidly into bed using wood blocks of sizing insuring solid bedding, bedding free from depressions and high spots. Finish flush with adjacent paving, pool equipment and/or drains. When ready, fill joints full and flush with specified grout, wipe excess grout from face of tile, and leave all joints finished at uniform depth.
- Grout colors for brick and tile shall be as called out on construction plan or details.

CONCRETE


- Concrete shall have a minimum compressive strength in 28 days of 2,500 PSI. Cement shall be type I.
- Reinforcing shall comply with ASTM A615, grade 40.
- No pipes or ducts shall be placed in concrete columns, walls or slabs unless specifically detailed.
- Reinforcing detailing shall conform to the Concrete Reinforcing Steel Institute "Manual of Practice", latest edition.
- Reinforcing, anchor bolts and all other embedded items shall be securely held in position prior to placing concrete.
- Walls and columns shall be doweled from supports with bars of the same size and spacing
- Splice continuous reinforcing with 40 diameters minimum lap.
- All expansion joints shall be 1/2" pre molded felt material and installed where indicated, and at all buildings, walls and fixed improvements.
- All expansion joints shall receive 1/2" thick sealing compound sealing compound. Color to match adjacent surface color.
- All concrete walks shall receive a medium broom finish, unless otherwise indicated.
- Score joints shall be tooled 1/4" wide by 1/4" deep as indicated.
- Weakened plane joints shall be 1/4" wide by 1/2" slab thickness deep.


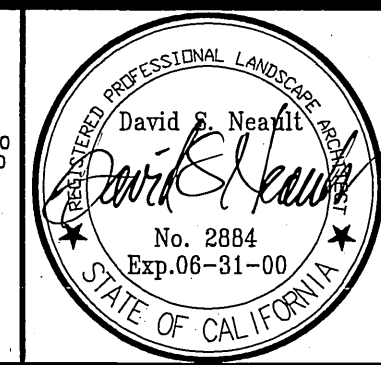
REINFORCED MASONRY

- Concrete block units shall be medium weight and comply with ASTM C90, grade N. Provide deep-cut bond beam units.
- Retaining walls and walls below grade should be grouted solid.
- All cells containing reinforcing shall be grouted solid.
- Immediately after grouting, consolidate grout using mechanical vibrating equipment. Rodding will not be accepted.
- Mortar shall consist of one part Portland cement, 3 1/2 to 4 parts sand based on dry loose volume, and not less than 1/4 part nor more than 1/2 part lime.
- Grout shall be 2,000 PSI minimum, proportioned 1 cement, 3 sand, 2 pea gravel.
- Reinforcing shall comply with ASTM A615, grade 40. Lap 40 diameters.
- All stucco wall shall water sealed with thirty (30) days of stucco color coat. All stucco shall match architecture in color and finish, except as noted.

METAL FENCING / GATES

- Fencing shall be seamless steel tubing, grade B, conforming to ASTM A501-81.
- Landscape Contractor shall secure all field measurements requires for proper and adequate fabrication and installation.
- Fencing and gates shall be fabricated and assembled in the shop to the greatest extent possible.
- All welds and another connections exposed in the finished work in the field shall be ground and dressed smooth and so that the shape and profile of the item welded is preserved.
- Gates shall received heavy-duty spring loaded hinge assemblies with self latching hardware.
- All surfaces shall be prime coated with synthetic, rust-inhibiting primer. Final finish shall be electrostatically applied of two coats of lusterless alkyl enamel. See plan for color.
- All gates shall be self-closing with steel stops.

PLANNING DEPARTMENT	
	11/6/00
SIGNATURE	DATE

 Underground Service Alert Call: TOLL FREE 1-800-227-2600 TWO WORKING DAYS BEFORE YOU DIG	PRIVATE ENGINEERING NOTE CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.	BENCHMARK RIVERSIDE COUNTY BENCHMARK, STAMPED Y88-64 AT SOUTHWEST CORNER OF PLUMMER ROAD AND VAN BUREN BOULEVARD, 250.0 FEET SOUTH OF VAN BUREN BOULEVARD, 205.0 FEET WEST OF PLUMMER ROAD, ON THE TOP OF A 4.0 FOOT x 10.0 FOOT GRANITE BOLDER A BRASS DISK FLUSH AND MARKED. ELEV. 1638.14	 David S. Neault No. 2884 Exp. 08-31-00 STATE OF CALIFORNIA	David Neault Associates, Inc. landscape architecture • planning • golf course architecture DAVID S. NEAULT PREPARED BY: DATE 2/26/01 41877 Enterprise Circle North #200 Temecula, CA. 92590 Tel: 909/296-3430 Fax: 909/296-3431 City of Riverside Building for Approval No. 12256-00 (02/01) 2884 R.L.A. NO. 22610 DATE	MARK DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____ REVISIONS: _____ APPR. DATE _____ CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT APPROVED BY: _____ DATE _____ BY: _____ PRINCIPAL ENGINEER PARK DEPARTMENT TRAFFIC DIVISION DESIGNER: P.M. DRAZDOR 12/16/00 DB STREET SERVICES 1/5/00 DSC	CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT REVERSE FRONTAGE WALL & MULTI-PURPOSE TRAIL CONSTRUCTION PLAN Construction Spec's. TRACT 28866-3 WOOD ROAD APPROVED BY: _____ DATE _____ BY: _____ PRINCIPAL ENGINEER PARK DEPARTMENT TRAFFIC DIVISION DESIGNER: P.M. DRAZDOR 12/16/00 DB STREET SERVICES 1/5/00 DSC	ACCOUNT NO. 31377 R-3538-WP SHEET 6 OF 6 11/16/2000
	INDEXED 1-8-01						
	L-6 TRACT 28866-3 ORANGECREST PA-2 Phase 3						
	PUBLIC WORKS						